



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,240	12/27/2004	Kazumichi Kayama	AW-C507	9707

7590 09/28/2006

George A. Loud, Esquire  
BACON & THOMAS  
625 Slaters Lane, Fourth Floor  
Alexandria, VA 22314-1176

EXAMINER
----------

HOLMES, JUSTIN K

ART UNIT	PAPER NUMBER
----------	--------------

3681

DATE MAILED: 09/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/519,240

Applicant(s)

KAYAMA ET AL.

Examiner

Justin K. Holmes

Art Unit

3681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 22-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/10/05</u>   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. The Examiner acknowledges receipt of the Information Disclosure Statement filed on February 10, 2005.
2. The Examiner acknowledges receipt of the Preliminary Amendment filed on December 27, 2004. The substitute Specification and Abstract have been entered. Claims 22-41 are pending.

### ***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "drive source" as defined in claim 22 and "differential unit for outputting rotation to drive wheels and a counter shaft unit for engaging said differential unit, wherein said output member is a counter gear meshing with said counter shaft unit" as defined in claim 39 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 22-41 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Specifically in claim 22, it is stated that a directly coupled state of the input shaft and the output shaft without change in speed by engagement of said first and second clutch in fifth speed and higher. However, in all the embodiments shown and described in the application, only the fifth speed has the first and second clutch engaged for a directly coupled state and sixth speed does not. For the purposes of continued prosecution it is assumed that first and second clutch are engaged only in the fifth speed at the same time. Appropriate correction is required.

6. Claims 26, 30, 32, 36 and 37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
7. Claim 26 recites the limitation "the case" in line 7. There is insufficient antecedent basis for this limitation in the claim.
8. Claim 30 recites the limitation "the case" in line 2. There is insufficient antecedent basis for this limitation in the claim.
9. Claim 32 recites the limitation "the case" in line 4. There is insufficient antecedent basis for this limitation in the claim.
10. Claim 36 recites the limitation "the case" in line 5. There is insufficient antecedent basis for this limitation in the claim.
11. Claim 37 recites the limitation "the case" in line 3. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 22-25 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent No. 2002-188694 to Kazumasa et al.

The Kazumasa et al patent teaches an automatic transmission having an input shaft 11 rotatably driven by a drive source; a first planetary gear unit G including first

Art Unit: 3681

S2, second, third, and fourth rotary components; reduced speed rotation output means G3 for receiving input rotation from said input shaft 11, for reducing the speed of the input rotation and for outputting rotation at the reduced speed to said first rotary component S2; a first clutch c1 that is engageable to connect said input shaft 11 and said second rotary component s1; a second clutch c2 that is engageable to connect said input shaft 11 and said third rotary component c; an output unit 19 for outputting the rotation of said fourth rotary component R2; wherein said automatic transmission provides at least five forward speeds, one reverse speed, and a directly coupled state wherein the rotation of the input shaft is output without change in speed by engagement of said first clutch c1 and said second clutch c2 in fifth speed and higher. See Figs. 5 and 6. The reduced speed rotation output means G3 is located on one axial side of said first planetary gear unit, and said output unit 19 is located between said first planetary gear unit G and said reduced speed rotation output means G3; and wherein said first clutch c1 and said second clutch c2 are located on the axial side of said first planetary gear unit opposite said one axial side. See Fig. 5.

Regarding claim 23, the reduced speed rotation output means G3 is a speed reducing second planetary gear unit that has a reduced speed rotary element R3 that rotates at reduced speed rotation and a third engaging component c4 for controlling rotation of the reduced speed rotary element r3 of the second planetary gear unit. See Fig. 5.

Regarding claim 24, the third engaging component c4 engages in first speed forward. See Fig. 6.

Regarding claim 25, the second planetary gear unit G3 has an input rotary element s3 that continuously receives input of the rotation of said input shaft 11, an intermediate element c3, and said reduced speed rotary element that can be rotated at a reduced speed based on the rotation of said input rotary element 11 and fixation against rotation 10 of said intermediate element c3; and wherein said third engaging component c4 is a third clutch that selectively connects said reduced speed rotary element and said first rotary component s2. See Fig. 5.

Regarding claim 31, the third engaging component is a third brake for b4 fixing the intermediate element c3 against rotation. See Fig. 1.

Accordingly, all the elements of claims 22-25 and 31 are anticipated by the Kazumasa et al. patent.

***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent No. 2002-188694 to Kazumasa et al. in view of U.S. Patent No. 5,525,117 to Morisawa et al.

The Kazumasa et al. patent lacks a teaching of a differential unit for outputting rotation to drive wheels and a counter shaft unit for engaging the differential unit.

The Morisawa et al. patent teaches front differential 18 for outputting rotation to drive wheels and a counter shaft unit 15 for engaging the differential unit 18 and the output member is a counter gear 13 meshing with the counter shaft unit 15. See column 4, lines 32-38 and Fig. 1.

It would have been obvious to one having ordinary skill in the art to modify the Kazumasa et al. patent to include the differential unit and counter shaft unit as taught in the Morisawa et al. patent in order to provide power to driven wheels through a transmission. See column 1, lines 7-11. The Examiner notes that it is well known in the art that vehicle transmissions are used to drive wheels to a vehicle.

***Allowable Subject Matter***

16. Claims 26-30, 32-38, 40 and 41 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 1st paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent No. 5,133,697 to Hattori; U.S. Patent No. 5,865,289 to Ishimaru; U.S. Patent No. 6,176,802 to Kasuya et al.; and U.S. Patent No. 6,960,150 to Armstrong et al. all teach planetary gear transmissions.

***Facsimile Transmission***

Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is (571) 273-8300. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a



patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check.

Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office (Fax No. (571) 273-8300) on \_\_\_\_\_ (Date)

Typed or printed name of person signing this certificate:

\_\_\_\_\_  
\_\_\_\_\_

(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up

Art Unit: 3681

copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin K. Holmes whose telephone number is (571) 272-5930. The examiner can normally be reached on 8:00am to 4:30pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (571) 272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
JKH

9/15/06

  
**CHARLES A. MARMOR**  
SUPERVISORY PATENT EXAMINER  
ART UNIT 3681